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INTUITION AND REASON.

THE question whether we act more frequently from intuition or reason, and the question that follows it, which faculty is the more noble guide to conduct, would have no more interest for the general public than any other of the subjects which the metaphysician exercises his ingenuity upon,—than the question, for instance, whether we execute a greater number of analytic or of synthetic judgments in the course of the day,—were it not that there is an ancient opinion to the effect that reason and intuition are marks respectively of the manner of working of men's and of women's minds. The opinion is wholly unfounded, and could only have had its origin at a time when the psychology of the working of the human mind was thoroughly misunderstood. As the very terms in which the opinion is expressed make plain, it dates from the period when it was the custom to speak of the human mind as having a lot of separate "faculties" under its control, and of calling up now one and now another of them to do its bidding. It is time that the belief in the different quality of men's and of women's minds should follow the whole antiquated machinery of "faculties" into the limbo of old and worn-out fashions of thought and of speech.

This illusion, however, like most of the illusions that have had a firm foot-hold in their day, has a perfectly comprehensible reason for its existence. It is not true that men's minds and women's minds have a different way of working ; but it is true that upon certain occasions (and by far the greatest number of occasions) we all—men, women, and negroes alike—act from intuition, and that the circumstances of women's lives have hitherto been such as to make their interests lie somewhat more exclusively in those regions in which

conduct is intuitive than in those in which it is long thought out. It is not true that the Creator has made two separate kinds of mind for men and for women ; but it is true that society, as at present constituted, offers two somewhat separate *fields of interest* for men and for women, and that the nature of their conduct is of necessity determined by the character of the action which is demanded of them.

What is the difference for the psychologist, between the mental state of a being who acts from reason, and of one who acts from intuition ? It is not a difference of the *kind of mind* which controls him, but of the *kind of knowledge* upon which his present conduct is based. If one individual has got at his command a lot of general propositions bearing upon the case in hand, and if his familiarity with them is not such that they flow together without conscious effort, then he must laboriously piece them together, and think out the conclusions which they necessitate. If another individual, having led a different life, has had a lot of experiences which cover just such cases as this, and if he has been taught by thousands of instances that under these circumstances a certain course of conduct will nearly always lead to good results, then he can trust to his hands or his feet to execute that course of conduct without a moment's aid from conscious reflection ; he can go on with his novel, or whatever other pleasant occupation engages his attention, without the wear and tear of mind which is involved in consciously thinking about the circumstances in question.

Now the differences in the mental processes of men and women are exactly of this nature. They are differences dependent upon the fact that the *knowledge* at their command—that is, the stored up premises upon which action is based—is, to a certain extent, of a different kind, and got from different sources. So far as the knowledge is not of a different kind, the character of the action is not of a different kind. There is an immense number of conclusions which men and women alike “jump at,” every hour in the day ; and some of them represent reasoning so fixedly instinctive, that even the closest attention does not enable us to drag it up into the light of consciousness. How many people know that a certain feeling of strain in the muscles which move the eyes is a sign of a certain dis-

tance of an object looked at, and a different feeling of strain, a sign of a different distance ; and that when the eyes are fixed upon one point, objects in the lateral field of view are judged to be nearer or farther away than that point, according as the two disparate images which they cast upon the two retinas are, the right-hand one or the left hand one, the brighter ? The common man *knows* that one object is near and the other far, but he is not *conscious* even of the feeling of strain, nor of the existence of double images ; the physiological psychologist knows the unconscious syllogism by which he *must* reach his conclusion, but even he cannot, by any possibility, make it cease to be instinctive,—that is, make himself conscious of its different steps. On the other hand, no one, whether man or woman, can pass from one proposition in geometry to another by a process which is in any sense unconscious, though one person may be obliged to give a much more strained attention to what he is doing than another.

Now it is very possible that a greater *number* of the actions of women have their ground in unconscious causes than of the actions of men. The subjects upon which action is of vital concern to them have been different subjects, and hence their stored-up stock of knowledge is knowledge about different subjects. To the woman of the past, who was to a great extent confined to her own home, the temper of her house-mates was what her happiness depended upon more than anything else in the world. It was impossible that she should not acquire a keen intelligence in interpreting every slightest shade of expression upon the human face. But this sort of knowledge is always instinctive, whether it is practised by men or by women. If the eyes of the most reasonable man in the world should chance to show him a certain curve of the lip and a certain elevation of the posterior angle of the alæ of the nostrils on the face of the fair lady to whom he was talking, would he try to call to mind the pictures in Sir Charles Bell's great work on expression and the general theorems in Darwin's book on the same subject, and piecing this and that laboriously together, would he try to arrive at some just conclusion regarding the contents of the fair lady's mind ? Would he not, rather, instinctively change the subject of conversa-

tion, or even discreetly beat a retreat, long before he had time to *think?* Women's interests have been so exclusively social that they have developed a sense for the physical expression of emotion which makes society for them a matter of complicated relations, of delicate susceptibility to play of feeling, which—except in the hyper-sensitive period of courtship—is not common among men. But there are men who are quite the equals of women in this respect; and if any man is markedly deficient in these qualities, we recognise him as belonging to a low and brutal type which is in process of extinction. If a woman on the other hand, goes into business, she does not fix the prices of her straw hats each morning in accordance with the feelings which straw hats awaken in her when she first looks at them, but in accordance with the fluctuations of the market. The President of a New Hampshire Street Railway did not carry through her improvements by her intuitions, but by a plain, common-sense weighing of reasons. Nor are all masculine occupations under the guidance of the reasoning faculty. If you go to a stove-man and ask him to mend your smoking chimney, does he do it by reason? Not a bit of it! There may be stove-men who have enough knowledge of the laws which regulate the movements of masses of hot air to be able to apply general principles to particular instances, but in the course of a long and checkered experience with stove-men, it has not been my lot to fall in with them. Their knowledge of chimneys, such as it is, is got by experience and applied by intuition, and nothing is farther from their minds than any trace of deductive reasoning. It is not that there are men's minds and women's minds, but that there are theoretical subjects and practical subjects, and that knowledge is not the same kind of knowledge in both.

Intuition, in the sense in which it is used when discussing male and female minds, is a word of double meaning: it covers those actions which we go through with by instinct, or inherited experience ingrained from the beginning in our nervous structure, and those which we perform automatically, or by individual experience become so familiar that it can act as a guide without the aid of conscious reflection. The relative distances of objects looked at we know instinctively; the trained musician with mind intent upon ex-

pression, reads his notes automatically ; the beginner at the piano goes through a painful process of syllogism before each key is struck. All is, at bottom, reason ; in one case it is conscious ; in another it is unconscious, but can be forced into consciousness ; in another, it is unconscious and cannot by any effort be made conscious. Because a woman's interests lie more than a man's in regions in which thought is instinctive and automatic, it does not follow that she has developed any peculiar powers of intuition. Nor is there any possibility that mothers should occasionally transmit their powers of intuition to favored sons, as Mr. Grant Allen, in the course of his apotheosis of the uneducated woman, has somewhere suggested ; some men have poetic and æsthetic minds, and in regions of poetry and art mental activity is largely of the instinctive kind. It is different with powers of reasoning. Good powers of reasoning may be transmitted from mother to son, but that is merely saying metaphorically that a good firm texture of mind may be transmitted. Hume and James Mill are two men who are supposed to owe much to their mothers, but their peculiar powers are not usually considered to lie in regions of intuition. No mother has ever produced an intuitive mathematician. Nor would any one who knew anything about the higher mathematics for a moment suppose that when a great mathematician leaves out intermediate steps in a printed book, he had jumped at his conclusions by instinct. It is simply that, with his thorough knowledge of this particular subject, the intermediate steps have seemed to him too easy to set down. If his book is hard to read, it is simply because he has assumed a greater amount of learning in his readers than they are in possession of.

The question whether intuition or reason is the nobler faculty is an exceedingly meaningless question. All knowledge which finds frequent occasion to be put in practice has a tendency to become first automatic and then instinctive. Human progress consists in making conscious action automatic as soon as it can be done with safety, and in setting free consciousness to attend to more and more complicated combinations of circumstances. After the musician has learned to read his notes mechanically, shall we urge him to go back to the period of conscious linking of note to key, because rea-

son is a diviner gift than intuition? Is it desirable to turn the act of walking into a conscious fitting of muscular tension to variations in the position of the centre of gravity in order to distinguish ourselves the more effectually from the brutes that perish? Reason is merely intuition in its formative stage, and the sooner all our present reasoned convictions become mechanical, and conscious thought is set free to bring in more and more far reaching considerations to bear upon our actions (including in that term our conclusions), the sooner will a higher form of life be reached.

Wundt's students have made some experiments in his laboratory in the last two or three years, which throw a great deal of light upon this question,—they have caught automatism in the very act of formation. It has been noticed that different observers differed very much in the reaction time which they assigned to the several senses,—that is, the time required, for instance, to hear the tap of a bell, and to press a button in response. Wundt's students found that there are two different reaction times,—in one, time is taken to bring the tap of the bell into the focus of consciousness and to decide consciously what to do in response; in the other, the process is unconscious. The first is nearly twice as long as the second, and both are very constant quantities, for the same sense. The exact figures are, in seconds:

	FULL.	SHORT.	
Sound.....	.216	.127	N. Lange
“	.235	.121	Belkin
“	.230	.124	L. Lange
Light.....	.290	.172	L. Lange
“	.291	.182	Martius

It may be inferred from this that, even in the simplest matters intuition is very nearly twice as valuable a “faculty” as reason, as far as economy of time is concerned. (It would be interesting to determine the difference in fatigue.) But the interesting point is that the experimenter can teach himself to give either reaction time at his pleasure. If he thinks of his ears, he has a feeling of strain in them, and a long reaction time; if he directs his attention to his fingers (or if he thinks of indifferent matters) he is unconscious of

what is going on, and his reaction time is short. It is plain that the more of these educated brain-reflexes we can produce, the fuller and more complicated lives we shall be capable of carrying on. It may also be assumed that the ideal human being is the one who has many brain-reflexes, but who is capable of bringing them all into consciousness upon occasion. Connections that we cannot make conscious are a frequent source of illusion. When we move the eye-ball about by the will, objects seem to remain stationary ; but when, putting the finger on the under eye-lid, we push the eye-ball up and down in the socket, we cannot help *perceiving* that objects are moving up and down. Prof. William James suggests as a good experiment that some one who has eyes that he is not afraid of injuring should do this pushing several hours a day, and see if he cannot force conscious reason to do her work and to make him *see* that the objects are not moving.

For perfectly regular circumstances,—that is, for the world of nature or of human character so far as is governed by fixed laws,—reflex action presents an immense economy of time and work. To provide against extraordinary emergencies, it would seem to be desirable that we should have the power of interposing consciousness in the chain which begins with stimulus and ends in action. Whenever a large number of considerations, or considerations of an abstract character, have to be weighed and balanced, then reason is the only sufficient guide.

That women have no deficiency in the power of putting this and that together, when *this* and *that* are pieces of knowledge which are in their possession, is absolutely proved by a single circumstance. Geometry is a branch of learning which is entirely built up out of abstract reason, pure and undefiled. Geometry is studied, in the United States, in high schools, and it must not be forgotten that there are in this country (according to the Report of the Bureau of Education) *three times* as many girls as boys who take the high school course. It cannot be said, therefore, (as is said of girls who go to college) that the girls who go to the high school are a selected lot ; they are the very bone and fibre of the women who make up the country. Now if women could not reason, we ought to hear a

great hue and cry from the teachers of the geometry classes about the difficulty of teaching that subject to girls, and the girls ought to lament and moan over the impossibility of getting safely through with their demonstrations. Is this the case? I have never met with a teacher of geometry who thought his boys did better than his girls,—I have met with several who thought the reverse. As long ago as 1865, Her Majesty's Inspector of schools, after travelling through this country, said: "The teachers all tell me that the girls do fully as well as the boys in mathematics,—fully." Nor are any sad effects noticeable upon health or spirits. Day after day an army of girls goes smiling into the class-room and comes smiling out, utterly unaware that an unnatural wrench has been given to their delicate minds, and that they are being rapidly transformed into monstrous products of over-reason.

If girls show no defect in reason in the class-room, neither do boys show any defect in intuition,—in fact, their intuition about stretched strings and lines on balls are usually better than those of girls. I have kept a record for many years of errors committed by boys and by girls, and I have not been able to detect any difference in their character. It is true that it was a boy who once failed to get a problem in trigonometry for a week, because it was not expressly stated in the book that the milestones to which the problem related were a mile apart. My intimate acquaintance with the character of his mind prevented me, however, from attributing this failure in intuition to his superior reasoning powers.

The simple matter is that a good *mind* has good reasons and good intuitions both. Both qualities are summed up in the expressive popular phrase, "having your wits about you." If you are in full possession of your wits, you will trust to your instincts, when you must; to your acquired reflexes, when there is no sign of danger; and to your reason, when the question requires debate. It would be greatly for the good of the race if the common virtues should become more instinctive in men; and if women should be put into a position in which they can reflect more wisely upon the virtues which are only just in process of getting known to be such. The only reason that women do not guide themselves by far-reaching

principles in their every-day conduct, is that they have not made themselves acquainted with the doctrines of political economy and of abstract ethics. When women are in full possession of the higher education, there is no danger that they will not put it into practice, so far as it leads to practice. The human mind is so constituted that it cannot help taking account of all its knowledge. Propositions merely learned by rote, or the truth of which it is not absolutely convinced of, it may leave one side, but not what it really *knows*. Nor is there any danger that woman will lose her powers of intuition. The knowledge and skill which she has acquired in social matters will not desert her because she has made herself familiar with the speculations of philosophers, and can turn to them for guidance in the intricate questions of conduct which the complexities of modern life give rise to. So long as a woman's highest duty was to please her lord and master, her task was simple, but women are now awake to a sense of wider responsibilities. They are now aware that it is their highest duty *to be* the best possible kind of a human being, and *to do* whatever lies within their strength towards making the world the best possible kind of a world to live in. For this end they have urgent need of *all* the gifts that God has given them ; and he who would cripple their reason on the ground that intuition is a pleasing and a poetic guide, would do them a grievous wrong.

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